

## Big Island Invasive Species Committee Outreach: FY2010 Highlights

BIISC outreach has been very busy traveling island-wide to 55 events and meetings to promote invasive species awareness, particularly at green industry venues like farmers markets, seed exchanges, and plant sales. The outreach specialist was also awarded a scholarship to attend a seed symposium to learn about seed collection. Detection and prevention of little fire ants has been a priority message, particularly on the Kona side of the Big Island. Beekeepers have been an outreach target, due to recent critical pest arrivals, and the important role of bees as pollinators. BIISC is developing a citizen Eyes and Ears network in cooperation with the USGS Maui Eyes and Ears program. The outreach specialist also attended a pesticide awareness course and subsequently tested for and received a certified pesticide applicator license. Goals are to develop pesticide displays to reduce public fears of pesticide applications by ISCs.

## HISC Public Outreach: Measures of Effectiveness

### Agency adoption of rules and policies against invasive species:

- Worked with Three Mountain Alliance and Kohala watershed Partnership on invasives policy
- Attended meetings of the Harbor Master 2030 Planning Process to encourage consideration of invasive species facilities and inspections needs at harbors
- Attended meetings of the Hawaii County Agricultural Plan Update

### Adoption of Codes of Conduct by businesses:

- Attended 15 green industry events such as plant sales and farmers markets with displays promoting codes of conduct and best management practices for invasive species. Approximately 6000 people attended these events, with 1850 actively studying booth materials
- Worked with the HISC Ant Specialist, to promote his Farm Bill funded project developing an LFA Best Management Practices manual and little fire ant awareness
- Discussed certification programs with members of the Kona Little Fire Ant taskforce
- Makuu Farmers Market, Puna, Hawaii, required vendors to be little fire ant free and undergo mandatory detection and prevention training

### Number of print and broadcast media mentions:

- *Action on Invasive species: Part 1 Focus on LFA.* [www.westhawaii.com](http://www.westhawaii.com) July 2010
- *Community Early detection of invasive species.* [www.westhawaii.com](http://www.westhawaii.com) July 2010
- *Don't Say Uncle to Little Fire Ants. By Page Else and Ty McDonald* [www.westhawaii.com/articles/2010/03/07/features/features04.txt](http://www.westhawaii.com/articles/2010/03/07/features/features04.txt)

### BIISC's Early Detection Team hits the road to prevent new weeds from spreading out

The Big Island Invasive Species Committee's (BIISC) Early Detection Team is conducting an island-wide roadside survey as a cost-effective and proactive way to prevent future weed invasions. The island of Hawaii has some of the biggest invasive species challenges in the state with the largest populations of cougal frog, little fire ant, north carolinian rain thrips, fountain grass, and mimosa. Many Big Island nurseries and landscape artists have experienced these challenges firsthand and have pitched into the effort to prevent new pests and weeds from spreading. LICHI has endorsed a list of species to discourage planting because they have been known to "jump the fence." (The list can be found on the LICHI website at [www.lanidsp.com](http://www.lanidsp.com) under the invasive species heading).

The Early Detection program supports these industry efforts by being on the lookout for plants that seem to be "jumping the fence," have newly arrived, or are showing signs of weediness. Roadside surveys have been implemented throughout the state as an effective method of detecting species when they are still at a manageable level. BIISC's ED Team took to the streets in May 2008, beginning their surveys in Kau and South Kona. Twenty-one months later, Botanical Specialists and Early Detection staff, Jimmy Parker and Bobby Parsons, have traveled 1300 miles in the districts of North Kona, Upper

Puna, South Kohala and North Kohala to search for plants that could pose a problem. Take the princess, or empress tree (*Pisonia tomentosa*) for example; a known invasive that is on LICHI's "do not plant" list. After spotting it on ranchland, Parker and Parsons worked with the supportive landowner and the BIISC field crew to remove 10 cultivated and unsanctified trees that have thus far been the only ones found in their surveys. "It's really fulfilling work," says Parsons, who spent his first year at BIISC going after more widespread weeds like mimosa. "You can see the results so quickly and potentially remove the only population on the island." The effort required to get rid of a

small number of plants is far less than when it gets out of control and begins having a more severe impact on agriculture and the environment. "One of our other primary goals is to document new species," says Parker. And that they have. Recently publishing their findings through Bishop Museum, the team has discovered 7 new records on Big Island and sent 46 specimens to the Bishop Museum's herbarium. These new records help to keep track of all the invasive plants that are present in Hawaii and are important baseline data for future surveys. Christopher McCullough, President of the Hawaii Island Landscape Association, who, he says, "advises its mem-



bers to refrain from utilizing the plants listed on the LICHI Invasive Plant List," also sees the need for an Early Detection program. "I think it is important that our Green Industry members have a keen awareness and recognize the potential ornamental plants to become invasive." He says, "Early detection is critical to avoid naturalization of invasive plants in the native environment." That's a major goal for BIISC's early detection team, who has already made recommendations to the field crew that they respond to weedy ornamentals like rubber tree (*Cryosophora madagascariensis*) and smoke bush (*Buddleia madagascariensis*). "During our BIISC work trip to Kauai, we all saw how bad Buddleia can get where it is expected to be controlled and has spread in Keokee State Park," says Parsons. "Our efforts are also informed by how these species behave on other islands and try to prevent that from happening here." Even though they have been at this for almost two years, the BIISC Early Detection Team still has some distance to go. "This large scale survey has never been done before for Hawaii County," says Parker. Next on the map are the districts of Hamakua, North Hilo, South Hilo, and Lower Puna. They will continue to search the road less traveled for the next big pest which is no doubt a big job on a big island.

- *Little Fire Ant In Kona Hawaii Agriculture Bulletin April 2010*
- *Little Fire Ant In Kona Hawaii Landscape Bulletin April 2010*
- *Plume Poppy work in Kau Forest Reserve Kau Calendar November 2009*  
([http://www.kaucalendar.com/news/11\\_09p17.html](http://www.kaucalendar.com/news/11_09p17.html))
- *Kona Rubber Vine Eradication*. September 2009. West Hawaii Today  
<http://www.westhawaiiitoday.com/articles/2009/09/20/features/features01.txt>
- *Article about tree poppy (Bocconia frutescens) on the big island*  
<http://www.westhawaiiitoday.com/articles/2009/09/06/features/features05.txt>
- *Article in Hawaii Landscape about BIISC's Early Detection Team*
- *Kona Outdoor Circle Little Fire Ants April 2010 Ka Leo TV broadcast*
- *Kona Town Hall Meeting Little Fire Ants March 9, 2010 Ka Leo TV broadcast*
- *Community Forum KPUA Radio 670 AM 1/13/2010 Mangrove Eradication Project*

**Number of “hits” on invasive species web page:**

- BIISC added a FACEBOOK page
- On the HEAR hosted webpage there is a new early detection page, other pages have been updated and reports added

**Number of callers on pest hotline:**

- Advertised the importance of reporting at all events attended
- Maintain the BIISC hotline which gets approximately 15 calls per month.
- Worked towards publicizes <http://www.reportapest.org>
- Worked with MISC, Kona Little Fire Ant Taskforce, and Hawaii Island Landscape Industry to get LFA placards on bus that advertise pest hotline

**Number of education materials produced:**

*Supply budget was non-existent during this reporting period so products were produced cheaply in house with limited printing*

- Early detection brochure, event exhibits on WiliWili Biocontrol, Mosquito Impacts, Green Industry Invasive Prevention Tools, Speed of Invasives Spread, Insect Biology, Biocontrol Successes, Astronomy related (planetary protection policy, astrobiology, space technology and invasive spread detection). Wao Kele o Puna Project Site,
- Exhibit on Cultural Importance of Native Hawaiian insects developed by BIISC PIPES intern

**Number of people reached through talks and displays:**

- BIISC attended 55 total events having 36,200 people present, and 11,300 actively studying booth materials.
- BIISC has an outreach opportunity not present on the other islands in participating in astronomy outreach events. Astroday, held yearly at the beginning of May, brings over 10,000 people to learn about astronomy. BIISC focused exhibits for that day include discussions of the potential for invasives in space, planetary protection policy, and space technology detecting invasives on Earth. In addition, an astronomy block party celebrating the International Year of Astronomy held in October 2009 attracted over 1500 people.

- For the first time, BIISC and other conservation agencies participated in the Merry Monarch Parade in April 2010. Staff marched behind floats holding conservation displays.
- The discovery of little fire ants in Kona created much educational buzz. A presentation at the Kona Town Hall meetings was also televised.
- An educational presentation was given to a Montessori preschool in which kids decorated a large box as a lava tube in a native forest threatened by invasives.



### **New educational programs and community events**

- Worked with the Waimea Community Association and Volcano Community Association to develop community Eyes and Ears programs
- Worked with East Coast college students on mangrove removal
- Worked with Hilo High School students on field days for Miconia control
- Worked with Malama o Puna on B-Wet grant materials
- The Waikola Outdoor Circle sponsored their first annual Wili-Wili festival, featuring their dryland forest restoration efforts. This was a good opportunity to publicize the success of the gall wasp biocontrol.
- BIISC met the Kokua Farm Lots Association Board to discuss access issues for one of our control projects.
- BIISC hosted an intern from the University of Hawaii PIPES program for Native Hawaiians. Part of the intern's duties were assisting with outreach, particularly in cultural settings and strengthening BIISC connections to cultural practices. The intern wrote an oli aloha for BIISC staff to use, based on interviews with staff.

### **Number of volunteers recruited and/or referred to invasive species projects:**

Total number of volunteers for ISC projects.

- 100

Total number of partnership projects that involved volunteers.

- 5

Total number of volunteers referred to other invasive species projects

- 20

### **Additional activities that also helped achieve HISC objectives:**

New partnerships formed.

- Kona Little Fire Ant Taskforce
- Beekeepers
- Malama o Puna B-wet grant partnership
- BIISC attended many events sponsored by the Green Industry. This helps get out our information, and builds a contact network and relationships essential for further progress.

BIISC attended meetings with green industry representatives and CGAPS to help publicize the Plant Pono project.

- BIISC attended beekeepers association meetings to help spread information on taxonomic supergroup pests like the varroa mite, small hive beetle, and little fire ant.
- Articles were written on early detection and outreach materials developed.
- Biocontrol educational materials were included at most events and was featured in the Hilo High School and Lyman museum oral presentations. Staff also attended the biocontrol outreach training session at the Bishop Museum.